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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte HAN-YOUNG HONG

Appeal 2007-2276
Application 09/916,245
Technology Center 2600

Decided: December 17, 2007

Before HOWARD B. BLANKENSHIP, MAHSHID D. SAADAT, and
ROBERT E. NAPPI, *Administrative Patent Judges*.

BLANKENSHIP, *Administrative Patent Judge*.

DECISION ON APPEAL

1 This appeal involves claims 1-8, 10, 12, 13, and 15. We have
jurisdiction under 35 U.S.C. §§ 6(b), 134(a).

INTRODUCTION

The claims are directed to a closed circuit television (CCTV) system that is intended to prevent channels from being mixed while videos are being reproduced. (Abstract.) Claim 1 is illustrative:

1. A closed circuit television (CCTV) system comprising:

a number of cameras for generating picture signals;

a multiplexer allotting identification information to each of the picture signals received from the cameras, said identification information being represented by a predetermined number of bits so that a number of available identifications is twice or more than the number of the cameras, said identification information comprising a plurality of proper identification bits and a corresponding plurality of auxiliary bits, characterized in that the proper identification bits identify which camera generated a corresponding picture signal; and

a picture signal storage medium for storing the picture signals and allotted identification information output from the multiplexer.

The Examiner relies on the following prior art references to show unpatentability:

Tsugane	US 4,961,211	Oct. 2, 1990
Cooper	US 5,870,139	Feb. 9, 1999
Kim	US 6,912,351 B1	Jun. 28, 2005
		(filed Oct. 19, 1998)

The rejections as presented by the Examiner are as follows:

1. Claims 1, 3, and 4 are rejected under 35 U.S.C. § 102(e) as being anticipated by Kim.
2. Claims 2, 5, and 6 are rejected under 35 U.S.C § 103(a) as unpatentable over Kim.
3. Claims 1-8, 12, and 13 are rejected under 35 U.S.C § 103(a) as unpatentable over Tsugane and Cooper.
4. Claims 10 and 15 are rejected under 35 U.S.C § 103(a) as unpatentable over Tsugane, Cooper, and Appellant's admitted prior art (instant Fig. 3).

The Examiner has objected to claims 9, 11, 14, and 16 as being dependent upon a rejected base claim, but allowable if rewritten in independent form.

Claims 17-20 have been canceled.

OPINION

Section 102 -- Kim

Kim describes a time lapse recording apparatus (Fig. 2) comprising 1 to "n" cameras that may be selected by switch 80. Video from a selected camera is stored in frame memory 100 and ultimately recorded on optical disk 1 by means of recording/reproduction unit 140. Kim col. 2, l. 62 - col. 3, l. 32. A controller sends to MUX 130 a camera (channel) identification code signal corresponding to the channel selection by the switch 80, so that

the camera ID code is added to a data packet including the corresponding image frame. Col. 4, ll. 34-38.

Kim Figure 6 shows an example of a data structure to be recorded and reproduced on, and from, the optical disk medium. The data structure carries the physical address of the bit stream, the camera ID code, the address of the corresponding I-picture frame (intra-frame data in accordance with a Moving Picture Expert Group (MPEG) standard), and picture data stored in the picture data area. Kim, col. 4, l. 39 - col. 4, l. 7.

Because Kim Figure 6 appears to show a camera ID code consisting of four bits, Appellant contends that the number of cameras is limited to fifteen. According to Appellant, Kim would have to disclose a limit of seven cameras to meet the claim 1 recitation that the number of available identifications is “twice or more” than the number of the cameras. (App. Br. 7-8.)

Claim 1, however, recites “a number” of cameras for generating picture signals. If we assume there are bits sufficient in number to uniquely identify each of fifteen cameras (actually, sixteen, if four bits are used), when only two cameras are in use in the Kim apparatus the “number of available identifications is twice or more than the number of the cameras.” Fifteen (or sixteen) is twice or more than two. Appellant’s argument is not commensurate with the broad scope of the claim.

Appellant seems to acknowledge that Kim describes “auxiliary bits” that are additional to the “proper identification bits” within the meaning of

instant claim 1. Appellant argues, however, that Kim does not disclose the same number (four) of auxiliary bits as “proper identification” bits. (App. Br. 8-9.)

First, we disagree with the premise of the argument -- that Appellant has somehow re-defined “corresponding” (as in claim 1) to be limited to mean “the same” (as argued). However, even if we assume that the claim requires, for example, four “auxiliary bits” when there are four “proper identification bits,” Kim in Figure 6 shows four “auxiliary bits” within the meaning of claim 1. There are, for example, four bits in the “corresponding I-picture address,” adjacent to the four camera ID code bits, that are “auxiliary bits” for all that the claim requires. The claim simply does not place any limitation on what the “auxiliary bits” are to be, to represent, or to mean, other than that the bits are a “corresponding plurality.” Appellant’s arguments are, again, not commensurate with the invention that is claimed.

The *claims* measure the invention. See *SRI Int’l v. Matsushita Elec. Corp.*, 775 F.2d 1107, 1121 (Fed. Cir. 1985) (en banc). Our reviewing court has repeatedly warned against confining the claims to specific embodiments described in the specification. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1323 (Fed. Cir. 2005) (en banc). During prosecution before the USPTO, claims are to be given their broadest reasonable interpretation, and the scope of a claim cannot be narrowed by reading disclosed limitations into the claim. See *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997); *In re Zletz*, 893 F.2d 319, 321 (Fed. Cir. 1989); *In re Prater*, 415 F.2d 1393, 1404-05 (CCPA

1969). “[D]uring patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed.” *In re Zletz*, 893 F.2d at 321.

We thus find claim 1 to be anticipated by Kim even if we give weight to the meaning attributed to the “bits.” We also note, however, that nothing is done with the “bits” in claim 1 other than being allotted by a “multiplexer” and stored on a “picture signal storage medium.” The bits do not change any underlying machine function. The bits (i.e., data) consist of what has come to be known as nonfunctional descriptive material. *See In re Ngai*, 367 F.3d 1336, 1339 (Fed. Cir. 2004) (“[w]here the printed matter is not functionally related to the substrate, the printed matter will not distinguish the invention from the prior art in terms of patentability,” quoting *In re Gulack*, 703 F.2d 1381, 1385 (Fed. Cir. 1983)); *In re Lowry*, 32 F.3d 1579, 1583 (Fed. Cir. 1994) (“Lowry does not claim merely the information content of a memory. . . . [N]or does he seek to patent the content of information resident in a database.”). *See also Manual of Patent Examining Procedure* § 2106.01, p. 2100-17 (“USPTO personnel need not give patentable weight to printed matter absent a new and unobvious functional relationship between the printed matter and the substrate” (citing *Lowry* and *Ngai*)). What the bits of claim 1 are to “represent” are not entitled to weight in the patentability analysis. The claim is anticipated by the Kim system’s allocation and storage of bits, even before reaching consideration of what the data are intended to represent.

We do not, however, sustain the § 102 rejection of claim 3 over Kim. Kim describes optical disk 1 “or other types of memories.” Kim col. 3, ll. 30-31. The reference notes the disadvantages attendant to conventional time lapse video cassette recording. Col. 1, ll. 13-67 (in particular, ll. 57-67). We do not find Appellant’s argument that Kim “teaches away” from the invention to be persuasive. Whether a reference may be considered as “teaching away” from an invention is relevant to obviousness but not anticipation. Appellant’s cited support for the proposition that a “teaching away” relates to lack of anticipation fails to support the proposition. (See App. Br. 10, citing *Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve Inc.*, 796 F.2d 443 (Fed. Cir. 1986).)

However, we do not sustain the rejection of claim 3 because we agree with Appellant’s arguments to the extent that Kim fails to describe an invention sufficient to support a finding of anticipation. Under a fair reading of the reference, Kim does not contemplate or convey that optical disk 1 (Fig. 2) might represent a video tape system, even if it might represent “other types of memories” than the depicted optical disk. The rejection fails to show an embodiment in Kim that meets the requirements of claim 1 and yet has a picture signal storage medium that comprises a single video tape in a single video tape recorder.

We sustain the rejection of claim 4, depending from claim 1, and not separately argued by Appellant.

Section 103 -- Kim

Claims 2, 5, and 6 are rejected under 35 U.S.C. § 103 over Kim. We sustain the rejection because Appellant relies on the unpersuasive arguments in response to the rejection of claim 1 over Kim. (*See* App. Br. 11; 37 C.F.R. § 41.37(c)(1)(vii).)

Section 103 -- Tsugane, Cooper

Claims 1-8, 12 and 13 are rejected under 35 U.S.C. § 103 over the teachings of Tsugane and Cooper.

Tsugane describes a television conference system comprising four TV cameras 5 through 8 (Fig. 1) linked to four TV monitors 32 through 35. Each of the TV cameras has its own 2-bit binary ID (monitor ID, or IDM) code to identify its picture signal. Tsugane col. 3, ll. 35-68. During a conference, each time a speaker is selected the moving picture DI, the monitor ID signal IDM, and the voice signal DV of the speaker are multiplexed and transmitted. On the receiving side, the moving picture is displayed on one of the TV monitors corresponding to the monitor ID signal IDM. Still pictures are displayed on the remainder of the monitors. Tsugane col. 4, ll. 27-43. In particular, multiplexer 104 multiplexes the monitor ID signal IDM, the K-bit picture data output from A/D converter 102, and the J-bit voice data output from the A/D converter 103. Col. 7, ll. 34-63. As an example, K equals 8 and J equals 14. Col. 5, ll. 43-63.

Appellant argues that because Tsugane shows four cameras identified by two bits, the number of identifications is not “twice or more” than the number of cameras, as recited in instant claim 1. (App. Br. 12-13.)

However, as we indicated in our discussion of Kim as applied to claim 1, the claim recites “a number of cameras” for generating picture signals. When there are only two speakers using the conferencing system described by Tsugane, the number of available identifications is “twice or more” than the number of cameras because four is “twice or more” than two.

Appellant also argues that two bits “does not correspond” to fourteen bits (i.e., the J-bit voice data). (App. Br. 13.) As we also indicated in our discussion of Kim and claim 1, the “corresponding plurality of auxiliary bits” of claim 1 does not read “corresponding plurality of auxiliary bits that are the same in number as the proper identification bits,” because the claim does not say “corresponding plurality of auxiliary bits that are the same in number as the proper identification bits.” As we also indicated previously, nothing much is required of the “auxiliary bits” of claim 1. The “corresponding plurality” recitation is sufficiently broad to read on the first two bits of the 14-bit voice data associated with the camera ID bits in Tsugane, even if we pretend that “corresponding” means “the same in number.”

Appellant also submits that the voice data signal (voice data bits) in Tsugane is voice information, rather than “identification information” as contemplated by claim 1. (App. Br. 14.) However, claim 1 recites that the

“identification information” is allotted to “each of the picture signals received from the cameras,” and that the “identification information” is “represented” by a predetermined number of bits. “Identification information” (camera ID and voice data bits) in Tsugane is allotted to each of the picture signals received from the cameras, and is represented by a predetermined number of bits (either of four or sixteen -- two plus two or two plus fourteen, depending on how “corresponding” is to be read as a limitation). The camera ID and voice data bits of Tsugane meet everything that is required of the “identification information” of claim 1. We therefore find Appellant’s argument to be not persuasive.¹

Also with respect to claim 1, Appellant submits that Tsugane does not teach recording video in a single video recorder, and there is no need to modify Tsugane according to the teachings of Cooper. (App. Br. 15-16.)

Instant claim 1 does not specify recording video in a single video recorder. Moreover, claim 1 recites “a picture signal storage medium for storing the picture signals and allotted identification information output from the multiplexer,” which does not specify how long, or for what purpose, the picture signals and information are to be stored. Tsugane’s Decoder 200 (Fig. 1) teaches everything that claim 1 requires of the “picture signal

¹ Moreover, as pointed out in our discussion of claim 1 and Kim, the data in claim 1 represent no more than nonfunctional descriptive material. What the “bits” of claim 1 are recited to represent is not entitled to patentable weight; i.e., not a limitation.

storage medium.” The teachings of Cooper thus may be considered merely cumulative in view of the broad recitations of claim 1.

With respect to claim 3, Appellant acknowledges that Cooper discloses the use of a video recorder, but alleges that “Cooper does not teach the use of a video *tape* recorder.” (App. Br. 17.) Appellant does not submit what type of video recorder that Cooper might teach, if not a video tape recorder.

Cooper describes a generic video recorder 600 (Fig. 1) that stores multiplexed video and audio signals from multiple cameras 301-304. Video cassette recorders for recording from a plurality of cameras were well known in the art (*see, e.g., Spec. ¶¶ 3-4*). We disagree that the artisan would conclude that Cooper fails to teach the use of a video tape recorder.

Also with respect to claim 3, Appellant relies on the Kim reference as allegedly “teaching away” from the use of a video tape recorder. (App. Br. 17.)

A prior art reference must be considered in its entirety, including portions that would lead away from the claimed invention. *See W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1550 (Fed. Cir. 1983). “A reference may be said to teach away when a person of ordinary skill, upon [examining] the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant.” *Para-Ordnance Mfg. v. SGS Importers*

Int'l, Inc., 73 F.3d 1085, 1090 (Fed. Cir. 1995) (quoting *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994)).

The Kim reference, however, has not been applied in the instant rejection of claim 3, and its teachings have thus not been taken out of the context of the entirety of the reference. Moreover, Appellant has adduced no evidence to show that the prior art as a whole discouraged the use of video tape recording. On the contrary, the evidence shows (e.g., Spec. ¶¶ 3-4) that video tape recorders for multiple camera recording were conventional at the time of Appellant's invention.

Finally, with respect to claim 3, Appellant alleges that the combination of Tsugane and Copper is not well founded because Tsugane has no need for video recording. The allegation is not persuasive of nonobviousness. A person having ordinary skill in the art uses known elements for their intended purpose. *Anderson's-Black Rock, Inc. v. Pavement Salvage Co.*, 396 U.S. 57 (1969) (radiant-heat burner used for its intended purpose in combination with a spreader and a tamper and screed). “[W]hen a patent ‘simply arranges old elements with each performing the same function it had been known to perform’ and yields no more than one would expect from such an arrangement, the combination is obvious.” *KSR Int'l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1740 (2007) (quoting *Sakraida v. Ag Pro, Inc.*, 425 U.S. 273, 282 (1976)). The artisan would have appreciated that the use of a video tape recorder with the Tsugane system (e.g., for conference archiving) would have yielded nothing unexpected,

instead merely consisting of the use of known elements according to their known functions.

Appellant's arguments in defense of claim 5 (App. Br. 17-19) are based on improper claim interpretation. The arguments are premised on the belief that claim 5 somehow limits the subject matter to a "single" monitor. On the contrary, the claim recites the open-ended ("comprising") term of "a" monitor. Tsugane describes a monitor within the meaning of claim 5; e.g., monitor 32 depicted in Figure 1. Appellant appears to recognize (App. Br. 19) that manual switches described by Tsugane qualify as part of the "selection unit" as recited in claim 5. In particular, the Tsugane selection unit enables a user to select picture signals corresponding to a particular one of the cameras -- camera 5 (Fig. 1), for example -- for display on monitor 32.

Appellant also submits arguments for claim 7 (wherein the logical values of the claim 1 auxiliary bits "are opposite to" the logical values of the proper identification bits) and claim 12 (identical to, rather than opposite). In claim 7 and claim 12, as in base claim 1, nothing is done with the data other than, at most, storage on a picture signal storage medium. Because the data are nothing more than nonfunctional descriptive material, it does not matter for patentability purposes whether the bits are all ones, all zeroes, or any combination of ones and zeroes. The further recitation of claim 7 (and claim 12) is anticipated by a description of storage of data on a picture signal storage medium (i.e., by Tsugane and by Cooper).

We have considered all of Appellant's arguments but are not persuaded that any claim rejected over Tsugane and Cooper has been rejected in error. We sustain the § 103 rejection of claims 1-8, 12 and 13 over Tsugane and Cooper.

Section 103 -- Tsugane, Cooper, Appellant's admitted prior art

As Appellant relies on the arguments for claims 7 and 12 (App. Br. 21), addressed *supra*, we sustain the § 103 rejection of claims 10 and 15.

New Ground of Rejection -- 37 C.F.R. § 41.50(b)

We reject claims 9, 11, 14, and 16 under 35 U.S.C. § 103(a) based on the evidence provided by Tsugane, Cooper, and Appellant's admitted prior art.

Claim 9 depends from claim 8, claim 11 depends from claim 10, claim 14 depends from claim 13, and claim 16 depends from claim 15. Appellant has failed to demonstrate that claims 8 and 13 (rejected by the Examiner under 35 U.S.C. § 103(a) as unpatentable over Tsugane and Cooper) and claims 10 and 15 (rejected by the Examiner under 35 U.S.C. § 103(a) as unpatentable over Tsugane, Cooper, and Appellant's admitted prior art) define subject matter that is nonobvious over the prior art. The further depending claims are drawn to, at best, mere arrangements of data (i.e., nonfunctional descriptive material) that may be recorded on a picture signal storage medium, but which do not result in any new and unobvious

relationship between the data and the storage medium, nor modify the function of any machine as claimed.

The recited data arrangements of claims 9, 11, 14, and 16 are not entitled to patentable weight, and thus cannot serve to distinguish over the prior art. *Cf. In re Lowry*, 32 F.3d at 1583 (“Lowry does not claim merely the information content of a memory.”); *Ex parte Curry*, 84 USPQ2d 1272 (BPAI 2005) (nonprecedential) (Federal Circuit Appeal No. 2006-1003; affirmed without written opinion Jun. 12, 2006).

CONCLUSION

In summary, we have sustained all the Examiner’s rejections except for the § 102 rejection of claim 3 as being anticipated by Kim. However, as we have sustained the rejection of claim 3 under § 103 over Tsugane and Cooper, the Examiner’s decision is affirmed.

A new rejection of claims 9, 11, 14, and 16 under 35 U.S.C. § 103(a) is set forth herein.

1 With respect to the affirmed rejection(s), 37 C.F.R. § 41.52(a)(1) provides that “Appellant may file a single request for rehearing within two months from the date of the original decision of the Board.”

In addition to affirming the Examiner’s rejection(s) of one or more claims, this decision contains a new ground of rejection pursuant to 37 C.F.R. § 41.50(b). 37 C.F.R. § 41.50(b) provides that “[a] new ground of

rejection pursuant to this paragraph shall not be considered final for judicial review.”

37 C.F.R. § 41.50(b) also provides that the Appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

(1) *Reopen prosecution.* Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner. . . .

(2) *Request rehearing.* Request that the proceeding be reheard under § 41.52 by the Board upon the same record. . . .

Should the Appellant elect to prosecute further before the Examiner pursuant to 37 C.F.R. § 41.50(b)(1), in order to preserve the right to seek review under 35 U.S.C. §§ 141 or 145 with respect to the affirmed rejection, the effective date of the affirmance is deferred until conclusion of the prosecution before the Examiner unless, as a mere incident to the limited prosecution, the affirmed rejection is overcome.

If the Appellant elects prosecution before the Examiner and this does not result in allowance of the application, abandonment or a second appeal, this case should be returned to the Board of Patent Appeals and Interferences

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for final action on the affirmed rejection, including any timely request for rehearing thereof.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED -- 37 C.F.R. § 41.50(b)

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